## Homework 4: Due Oct. 23, 2014

Hand in a hard copy at the beginning of class. Show your work.

- 1. Population growth rate calculations
  - (a) The population of India in 2012 was roughly 1.26 billion. Its population was growing at a rate of 1.5%. Assuming that growth continues at that rate, what will be India's population in the year 2060?
  - (b) Calculate the doubling time of India's population at its current growth rate.
  - (c) Starting with the world population in mid-2013 of 7.137 billion, and using an average growth rate of 1.2%, calculate in what year the world population density on dry land will reach 1 person/m<sup>2</sup> (the world has a dry land area of  $1.31 \times 10^{14}$  m<sup>2</sup>).
- 2. Do question 14 on page 185.
- 3. Do questions 17a,b,c on page 185.